^{46}Ti(t,p) 1971Ca19,1967Hi03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 179, 1 (2022)	30-Nov-2021

1967Hi03: E=9.64 MeV triton beam was produced from the Aldermaston tandem electrostatic generator. Target was ≈100 μg/cm^2 ^{46}Ti on a ≈10 μg/cm^2 carbon film. Reaction products were momentum-analyzed with a multi-range spectrograph. Measured $\sigma(\theta$=12.5° to 65°). Deduced levels, L-transfers from PWBA analysis. Comparisons with available data.

1971Ca19: E=13 MeV triton beam was produced from the Los Alamos tandem accelerator. Target was 40-60 μg/cm^2 metallic Ti (31.05% in ^{46}Ti) on a carbon foil. Reaction products were momentum-analyzed with an Elbek-type magnetic spectrograph and detected with nuclear emulsions. Measured $\sigma(\theta$=12.5°, 20°). Deduced levels.

^{48}Ti Levels

E(level)†	L†	Comments
0.0	0‡	
977 *15*	(2)	
3000 *20*	0	
3623 *15*	2	
4043 *15*	(2)	
4250 *20*		
4385 *15*	(4)	
4590 *15*	0	E(level): weighted average of 4591 *15* (1967Hi03) and 4589 *15* (1971Ca19).
4800 *15*	2	
4969 *10*	0‡	E(level): weighted average of 4974 *15* (1967Hi03) and 4967 *10* (1971Ca19).
5499 *15*	2	
6014 *15*		

† From 1967Hi03, except as noted.
‡ Strong.